Excerpt from a radio talk by W. W. Vincent, chief, western district, Food and Drug Administration, U. S. Department of Agriculture, delivered through KGO, San Francisco, and associated N.B.C. stations, March 19, 1931.

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HOW TO READ THE LABEL

Artificial Colors

Nature is lavish in her distribution of color, and it is from this color distribution that we know just when the apple, the pear, or the cherry has reached its most satisfactory condition. Undoubtedly, our early ancestors were guided largely by sight in the selection of their food supply. Today, color in a large measure determines our selections. Food manufacturers early became aware that appearance, as well as price, determined sales volume. Early in the 19th Century, consumers were complaining that the use of artificial colors was serving to conceal damage or adulteration in the materials either canned or bottled at that time. The colors used by the early manufacturers of food products were largely of vegetable origin. Some, however, were made from certain insects; some from molluscs; and again, mineral pigments were employed. It is only within the last 30 years that we have seen certain food manufacturers discontinue the use of the poisonous yellow lead chromate and red sulphide of mercury, in their products.

Next came the col-tar colors - the first one, mauve, made in 1856 by an English man, W. H. Perkin. Little did he realize the extent of the industry to follow and of which he was the creator. Engaged with Perkin was a German, Hoffman. Returning to Germany, Hoffman laid the foundation for the German dyestuffs industry. Germany controlled the coal-tar dye business until 1914 when the war forced other countries either to make their own or do without. Today, the United States produces the bulk that it consumes.

There is no more reason for you to object to the use of coal-tar colors than there is to object to vegetable colors. Some vegetable colors are dangerous, as are some coal-tar dyes. Coal-tar dyes have largely replaced the vegetable dyes and the Food and Drug Administration sanctions for use in food 15 harmless coal-tar dyes. Manufacturers and repackers of these 15 permitted dyes last year had tested and certified by the Administration a total of 355,495 pounds of straight dye, together with 331,023 pounds of dye mixtures. That huge quantity of material reaches you in various commodities in your soft drinks, your sausage casings, your candy, and numerous other food products.

The principal vegetable colors still in use are:

(1) Annatto, the yellowish dye, prepared from the pulp surrounding the seeds of a tropical American tree, commonly used to color butter and cheese.

(2) Turmeric, a spice, the root of a plant, used to impart the yellow

color to the prepared mustard and the curry powders of commerce.

(3) There are a few others, like the spice, saffron, made from the dried stigmas of the crocus plant; archil or cudbear, made from a species of lichens; and wood charcoal. They find a limited use in food products.

(4) Carminic acid - cochineal is the name you know it by - is not a true vegetable color. It is made from the dried bodies of a female insect that lives upon cactus plants. Some American tomato-paste manufacturers use it in order to give their product a color comparable with that of the tomato paste produced in Italy from the pear-shaped tomato.

Here are the fundamental facts that you should remember when buying foods: Certain foods are never artificially colored. Some foods are colored by some manufacturers, but are not colored by other manufacturers. Certain products are always artificially colored.

Remember this: When products contain artificial color and when such color is used solely for decorative purposes, the label need not have the presence of that color declared upon it. In such a case, the color is considered a normal constituent. Candies generally fall into this class. But fruit drops, or fruit-flavored confections, would contain artificial color for only one reason: to give the appearance of more fruit than actually is present. In that case, presence of the artificial color will be declared. Artificial color in food products, added under any other conditions, must be declared upon the label. But even though its presence is declared, the addition of such is illegal in the event that such coloring conceals damage or inferiority within the product.

Many of you have observed on food package labels such statements as: "harmless color added", "certified color added", or just "color added." Those expressions are used in lieu of the general statement, "Artificially colored." Again you may encounter the statement: "contains no coal-tar color", or, "color used in this product is purely vegetable." The inference that the manufacturer would have you draw from such statements is that vegetable colors are more to be favored than coal-tar colors. He is attempting to capitalize upon the old prejudice against coal-tar colors. The certified coal-tar colors, tested and approved by the Color Certification Laboratory of your Food and Drug Administration, are just as safe and just as wholesome as the vegetable colors.